



April 10, 2008 HAN: UPDATE: Measles outbreak in Pima County

A tenth case of measles has been laboratory confirmed in an unimmunized child hospitalized at University Medical Center in Tucson (Pima County). At the present time there is no known exposure to the 9 previous measles cases in Pima County. Therefore, this tenth case represents ongoing spread in the community. All measles cases have occurred in unimmunized people.

Measles is highly contagious and is spread through the airborne route, so nonimmune patients, staff, and hospital visitors at University Medical Center from April 3-April 8, 2008 may have been exposed to measles.

Patients with measles have a prodrome of fever, conjunctivitis, cough, coryza, and malaise for 3-5 days before the rash appears on their face and upper body, and then spreads down over the entire body over the following 3-4 days. Immunocompromised patients may not exhibit rash.

Measles was not initially suspected in this tenth case until the characteristic facial maculopapular rash appeared. Measles should be considered in any patient with fever, conjunctivitis, cough, coryza, and malaise, as well as any patient who presents with fever and a morbiliform rash. Measles should also be suspected in people born before 1957 who have compatible clinical symptoms, since a small percentage are susceptible. Although all cases so far have been identified in Pima County, measles cases could begin to be seen in other counties in Arizona.

Please consider measles in the differential diagnosis of ANY patient with a fever and rash. The following are in the differential diagnosis for measles and should trigger consideration of immediate measles testing:

- Drug rashes, including Stevens-Johnson syndrome
- Varicella
- Rubella
- Scarlet fever
- Infectious mononucleosis
- Toxic shock syndrome
- Rocky Mountain spotted fever
- Henoch-Schönlein purpura
- Serum sickness
- Roseola infantum
- Erythema infectiosum
- Echovirus
- Coxsackievirus

Any patient who is suspected of having measles should be immediately placed in airborne isolation.

Please contact your local health department immediately if you suspect that a patient may have measles. Measles testing with serology and viral culture can be facilitated by your local health department. Unimmunized contacts of measles cases can be vaccinated within 3 days of exposure, or given gamma globulin within 6 days of exposure to prevent or ameliorate the illness.

The Arizona Department of Health Services (ADHS) recommends that all health care providers in Arizona have documented evidence of immunity to measles as recommended in the 1998 ACIP recommendations for measles (<http://www.cdc.gov/mmwr/PDF/rr/rr4708.pdf>) as follows:

- 2 doses of MMR
- Serologic evidence of immunity to measles
- For individuals born before 1957, at least one dose of measles containing vaccine
- Documentation of physician diagnosed measles

A health care worker is defined as any person (i.e., medical or non-medical, paid or volunteer, full- or part-time, student or nonstudent, with or without patient-care responsibilities) who works at a facility that provides health care to patients (i.e., inpatient and outpatient, private and public)..

This outbreak highlights the risk of measles importation into any community and the burden of measles cases on health care facilities. We would strongly encourage all health care facilities statewide to evaluate the immune status of workers and suggest that susceptible individuals be vaccinated.

ADHS has also recommended that healthcare providers in Pima County use an accelerated measles vaccination schedule in children due to the measles outbreak. Children ages 6 months to 12 months of age should receive a single dose of measles-mumps-rubella (MMR) vaccine. Children \geq 12 months of age should receive their first dose of MMR as soon after their first birthday as possible. Instead of waiting for school entry to receive their second dose, children should receive their second dose of MMR as soon as possible while making sure that at least 4 weeks have passed between the first and second dose.

The accelerated schedule has been recommended because young children are at high risk of complications from measles and because 2 doses of MMR are required to give full protection against measles. In addition, most children ages 6-12 months old are susceptible to measles.

Please note, at the present time, ADHS has only recommended the accelerated schedule for children starting at 6 months of age for Pima County. For further questions, please contact your local health department or the Office of Infectious Disease Services at (602) 364-4562.

For more information about measles, please refer to the attached documents. Also, please see the ADHS measles website for measles information for clinicians and families http://www.azdhs.gov/phs/oids/epi/disease/measles/measles_g.htm. The Centers for Disease Control and Prevention measles website can be found at <http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm>.

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